

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A separation matrix comprising

- (a) a porous support; and
- (b) ligands including one or more sulphonamides wherein an R group of the sulphonyl is an aliphatic compound; wherein said ligands are immobilized, optionally via spacer arms, on said porous support,

wherein said separation matrix enables adsorption of antibodies at low ionic strength at pH values around neutral.

Claim 2 (previously presented): The matrix of claim 1, wherein the sulphonamide is coupled to the porous support via its nitrogen.

Claim 3 (previously presented): The matrix of claim 1, wherein the sulphonamide is coupled to the porous support via its sulphur.

Claim 4 (previously presented): The matrix of claim 1, wherein the R group is a methyl group.

Claim 5 (previously presented): The matrix of claim 1, wherein the nitrogen of the sulphonamide(s) is a primary or secondary amine.

Claim 6 (previously presented): The matrix of claim 1, wherein the ligands are monoamines.

Claim 7 (previously presented): The matrix of claim 1, wherein the ligands are polyamines.

Claim 8 (previously presented): The matrix of claim 7, wherein each polyamine comprises two to six amines.

Claim 9 (previously presented): The matrix of claim 1, wherein the ligands are present as repetitive units of a polymer immobilised to the support.

Claim 10 (previously presented): The matrix of claim 9, wherein the polymer is a polyethylene imine.

Claim 11 (previously presented): The matrix of claim 9, wherein the polymer exhibit two or more different ligand groups.

Claim 12 (previously presented): The matrix of claim 1, wherein the ligands are aliphatic compounds.

Claim 13 (previously presented): The matrix of claim 1, wherein the support is a cross-linked polysaccharide.

Claim 14 (withdrawn): A chromatography column packed with the separation matrix of claim 1.

Claim 15 (withdrawn): The chromatography column of claim 14, which is substantially sterile.

Claim 16 (withdrawn): The chromatography column of claim 14, which is a disposable column.

Claim 17 (withdrawn): A process of preparing a matrix for separation of antibodies, which method comprises a first step of immobilising amines and/or polyamines to a porous support and a subsequent step of sulphonylating said amines to provide aliphatic sulphonamide ligands.

Claim 18 (withdrawn): A process of preparing a matrix for separation of antibodies, which method comprises a first step of activating a porous support and a subsequent step

of attaching sulphonamides to the activated sites via their sulphurs to provide aliphatic sulphonamide ligands.

Claim 19 (withdrawn): A method of isolating antibodies from a liquid, which method comprises the steps of

- (a) providing a liquid that comprises at least one antibody;
- (b) contacting said liquid with a separation matrix, which comprises one or more aliphatic sulphonamide ligands, to adsorb one or more antibodies to said matrix; and, optionally,
- (c) passing an eluent over said matrix to release one or more antibodies; and
- (d) recovering at least one antibody from a fraction of the eluent.

Claim 20 (withdrawn): The method of claim 19, wherein the liquid provided in step (a) additionally comprises one or more other proteins.

Claim 21 (withdrawn): The method of claim 19, wherein the separation matrix of step (b) is provided in a chromatography column.

Claim 22 (withdrawn): The method of claim 19, wherein the separation matrix of step (b) is as defined in claim 1.

Claim 23 (withdrawn): The method of claim 21, wherein step (b) is performed at a close to neutral pH.

Claim 24 (withdrawn): The method of claim 19, wherein step (c) is a gradient elution performed by adding an eluent of decreasing salt concentration to the separation matrix.

Claim 25 (withdrawn): The method of claim 19, wherein step (b) is performed at a pH of or above neutral and step (c) is a gradient elution performed by adding an eluent of decreasing pH.

Claim 26 (withdrawn): The method of claim 19, wherein the antibodies recovered in step (d) are human or humanised antibodies.

Claim 27 (withdrawn): The method of claim 19, wherein the antibodies recovered in step (d) are immunoglobulin G (IgG).

Claim 28 (withdrawn): The method of claim 19, further comprising determining the amount of isolated antibody spectrophotometrically.